

New claim program, Gerfast 10/706,416

Claims.

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1. (cancelled) Butt-joining method comprising:

In two abutting metal strips punching a substantially rectangular slot into both abutments,

- 5 inserting into said two slots a deformable slug, clinching said slug into said slots,
thereby securely joining said strips.

2. (cancelled) Butt-joining method as defined in claim 1 wherein said slots
in both said abutments are keystone shaped instead of rectangular.

3. (cancelled) Butt-joining method as defined in claim 1 wherein said slots
10 in both said abutments have two rounded edges produced by both a punch and a die.

4. (cancelled) Butt-joining method as defined in claim 1 wherein said strips
are of other material than metal.

5. (cancelled) Butt-joining method as defined in claim 1 wherein a plurality of slots are used.

6. (cancelled) (Replaced by claim 15) Butt-joining method as defined in claim 2 wherein
15 said keystone shaped slugs slots are also having said rounded corners.

7. (currently amended) Butt-joining clinch method comprising:

In two abutting metal strips punching a substantially rectangular slot into both abutments,
wherein said slots have two rounded edges produced by both a punch and a die,

- using one knock-out-slug from said punching, re-inserting said slug into the center of both
20 said abutments, clinching said slug into said slots thereby securely butt-joining said strips.

8. (cancelled) Butt-joining clinch method as defined in claim 7 wherein said slots
in both said abutments is keystone shaped instead of rectangular.

9. (cancelled) Butt-joining clinch method as defined in claim 7 wherein said slots
in both said abutments have two rounded edges produced by both a punch and a die.

- 25 10. (currently amended) Butt-joining clinch method as defined in claim 7 wherein said
strips are of other material than metal.

11. (currently amended) Butt-joining clinch method as defined in claim 15 wherein a plurality of slots is used.
12. (previously amended) Butt-joining clinch method as defined in claim 7 wherein clinching height produced by said clinching is flush or slightly below
5 the surface of said strips.
13. (previously amended) Butt-joining clinch method as defined in claim 7 wherein said metal strips are mitered at 45 degrees and abutted at said mitering, with four said mitered strips forming a frame.
14. (currently amended)) Butt-joining clinch method as defined in claim 13 wherein
10 during said mitering remnants of said metal strips is purposely left at 45 degrees.
15. (Replaces claim 6) (currently amended) Butt-joining method comprising:
In two abutting metal strips punching a substantially keystone shaped slot into both abutments, wherein said slots have two rounded edges produced by both a punch and a die, inserting into said two slots a deformable slug, clinching said slug into said slots,
15 thereby securely butt-joining said strips.